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HOUSEKEEPERS' CHAT

Thursday, July 18, 1935

(FOR BROADCAST USE ONLY)

Subject: "THUNDER AND LIGHTNING." Information from the Weather Bureau, U.S.D.A.

--ooOoo--

If your flesh begins to creep when you see a flash of lightning, or if cold chills go up your spine whenever you hear thunder, I think you'll be interested in some facts I've collected from the men at the United States Weather Bureau. Lots of us have been raised on superstitions about lightning, and are taking all sorts of elaborate precautions during a storm that actually are no help at all.

The men at the Weather Bureau explain that lightning is simply an electrical charge seeking the earth. In doing so, it naturally takes the easiest path -- uses the best electrical conductors on its way. So, lightning may pass through anything like a house or a tree or a person -- anything that happens to be in its way.

Since the chimney is the highest part of the house and is often lined with soot, which is a good conductor, the chimney is the natural target for lightning. A charge striking it will go directly down until it discovers a better conductor on the way, such as metal fittings around the fireplace. Now, if this new conductor isn't grounded, the charge will naturally jump to the next nearest conductor leading toward the ground. If you happen to be standing in front of the fireplace at the time, you may get the full force of the discharge. So the Weather men suggest that you stay away from the fireplace during a storm that is striking very close. They also suggest that you avoid walls, stove and radiator. Generally the center of the room is the safest place unless it happens to be between one conductor, leading down from the roof, and another -- opposite, going toward the ground. This fact may soothe those nervous people who get into bed or hide in a dark closet during a storm.

Many people are afraid of both telephones and radios during an electric storm. During a severe storm, probably it's just as well to avoid the phone. Telephone wires strung overhead are often struck and occasionally the lightning follows the wire into the house. To prevent this, most telephone connections are now equipped with lightning arresters that prevent wire from carrying lightning into the house. But radios haven't given much trouble of this kind. Dangers from aerials have been greatly exaggerated.

One of the few old beliefs about lightning that the scientists still support is that warning against taking shelter under a solitary tree. Yet it is about as dangerous to be exposed in a clearing yourself where you are the tallest object in the area. Probably the best plan is to stand near a tree but not directly under it, so the tree will be the high-spot. In a group of trees, avoid standing under the tallest one. Also avoid wire fences during a storm, for wires are good conductors and can carry the current great distances unless they are grounded to prevent this. Seeking shelter in an isolated building is also hazardous, unless the building happens to have a natural conductor system, such as plumbing pipes running from the roof to the ground. Strange as it may seem, you'll be quite safe in a sky-scraper during a storm, a sky-scraper like the Empire State Building that has a steel skeleton. This framework provides a path for the lightning directly to the ground.

Another safe location is a building properly equipped with lightning rods. Don't smile. The men at the Weather Bureau say the lightning rod isn't a joke; it's the best possible protection for your house, or barn, or favorite tree, provided it is put up properly. Years ago many farmers were badly fleeced by swindlers selling worthless rods and this gave the lightning rod a bad reputation. But you don't have to worry about that now. Experts at the Weather Bureau can send you details on setting up lightning rods properly.

That old adage about lightning only striking once in the same place has no scientific backing. The Washington Monument, for example, was struck three or four times before it was properly equipped with lightning rods. Since then it has been struck a number of times with no damage. This fact spoils that superstition some people hold to about turning on all the electric lights for safety in a storm.

Another idea for your comfort. Never worry about lightning descending on you unless the storm is very close. If a pause of some seconds occurs between the flash and the thunder clap, the storm is some distance away. Only when the flash and report come almost simultaneously are you in danger. And then "if you see the flash, you'll know it missed you." The thunder that follows won't do a bit of harm.

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